## PRIMARY WATER BUDGET COMPONENTS DERIVED FROM INCREMENTAL SIMULATIONS OF THE SFWMM

This portion of Appendix I presents specific information regarding the primary water budget components of the SFWMM Version 3.7 simulations performed for the Lower East Coast Regional Water Supply Plan (LEC Plan). The information presented is derived from the 1995 Revised Base Case, the LEC incremental (2005, 2010, and 2015), and the LEC-1 Revised simulations. The capabilities of each incremental simulation depend on the water resource and water supply development features and the operational rules and strategies included in each simulation. Key information about the structural and operational components in the incremental simulations is provided in **Table I-1**. While the operational rules and strategies simulated reasonably represent existing operations and adjustments that will be made as components come on line, they are only illustrative of the capabilities of the system. Final decisions about the operating criteria will depend on additional planning, detailed designs, and as-built conditions. Decision points for the operating rules will include rulemaking that will adopt reservations of water, Minimum Flows and Levels (MFL), and MFL recovery and prevention plans.

The simulation results are presented in **Tables I-2** through **I-7**. Three pairs of tables contain information on the Lake Okeechobee water budget, the average amount of water delivered from individual plan components, and the water delivered to basins to meet demands from individual plan components. The first of each pair presents average annual information, while the second presents the average for five drought years (1971, 1975, 1981, 1985, and 1989) occurring during the 31-year simulation.

Park buffer area
• Leave S-333 structure in place

North of Lake Okeechobee Reservoir (201,250 ac-ft)

• C-111 Project

Table I-1. Summary of Key Structural and Operational Components and Assumptions.

Key Structural Components	Key Operational Components and Assumptions
1995 Revise	d Base Case
Present system components	Water Supply and Environmental (WSE) Schedule in Lake Okeechobee     Agricultural Field-Scale Irrigation Requirements Simulation (AFSIRS) demands and runoff in the Caloosahatchee Basin     Big Cypress Seminole Entitlement     No Best Management Practice (BMP) makeup water     No Everglades Agriculture Area (EAA) runoff reduction     Rainfall plan deliveries to Everglades National Park
Everglades Construction Project     Modified water deliveries as in the General Design Memorandum     C-111 Project     Utility preferred redistribution of wellfields     Utility Aquifer Storage and Recovery (ASR) in Miami-Dade County (25 MGD)     Broward Secondary Canal System (north only)	Operational changes due to the Everglades Construction Project WSE schedule in Lake Okeechobee Regulation schedules in Water Conservation Areas (WCAs) 1, 2A, and 2B. Rain-driven operations in WCA-3A and 3B Rain-driven operation for deliveries to Everglades National Park
20	010
<ul> <li>Everglades Construction Project</li> <li>L-31 seepage management without seepage barrier and new S336B structure to help Biscayne Bay</li> <li>WCA-3A and 3B seepage management</li> <li>Phase 1 of WCA-3A Decompartmentalization - Fill Miami Canal in WCA-3A</li> <li>WCA-3B Decompartmentalization - Degrade L-29 Levee but leave L-29 Canal - Remove S-355 structures - S-356 structure redirected into Everglades National Park buffer area</li> <li>Leave S-333 structure in place</li> <li>C-111 Project</li> <li>EAA Reservoir (180,000 ac-ft)</li> <li>EAA North Surge Tank (120,000 ac-ft)</li> <li>C-43 Reservoir (30,000 ac-ft)</li> <li>C-44 Reservoir (30,000 ac-ft)</li> <li>Site-1 Reservoir (14,760 ac-ft)</li> <li>C-9 Impoundment (10,000 ac-ft)</li> <li>C-11 Impoundment (6,400 ac-ft)</li> <li>Taylor Creek Nubbin Slough Reservoir (50,000 ac-ft)</li> <li>Utility preferred wellfield distribution</li> <li>Utility ASR in Miami Dade County (50 MGD)</li> <li>Broward Secondary Canal System (all)</li> </ul>	WSE schedule modified to send water to EAA reservoir     Regulation schedule in WCA-1     Rain-driven operations in WCA-2A, 2B, 3A, and 3B     Rain-driven operation for deliveries to Everglades     National Park
<ul> <li>Everglades Construction Project</li> <li>L-31 seepage management without seepage barrier and new S336B structure to help Biscayne Bay</li> <li>WCA-3A and 3B seepage management</li> <li>Phase 1 of WCA-3A Decompartmentalization <ul> <li>Fill Miami Canal in WCA-3A</li> </ul> </li> <li>WCA-3B Decompartmentalization <ul> <li>Degrade L-29 Levee but leave L-29 Canal</li> <li>Remove S-355 structures</li> <li>S-356 structure redirected into Everglades National</li> </ul> </li> </ul>	WSE schedule modified to send water to EAA reservoir and Lake Okeechobee ASR Regulation schedule in WCA-1 Rain-driven operations in WCA-2A, 2B, 3A, and 3B Rain-driven operation for deliveries to Everglades National Park

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Table I-1. Summary of Key Structural and Operational Components and Assumptions. (Continued)

Key Structural Components	Key Operational Components and Assumptions
EAA Reservoir (180,000 ac-ft) EAA North Surge Tank (120,000 ac-ft) C-43 Reservoir (160,000 ac-ft) C-44 Reservoir (30,000 ac-ft) C-44 Reservoir (30,000 ac-ft) Southern L-8 Reservoir (50,000 ac-ft) Palm Beach Agricultural Reserve Reservoir (19,920 ac-ft) Site-1 Reservoir (14,760 ac-ft) C-9 Impoundment (10,000 ac-ft) C-11 Impoundment (6,400 ac-ft) Taylor Creek Nubbin Slough Reservoir (50,000 ac-ft) Bird Drive Reservoir (11,500 ac-ft) C-43 ASR (220 MGD) Lake Okeechobee ASR (500 MGD) C-51 Regional ASR (170 MGD) West Palm Beach Catchment Area ASR (50 MGD) Palm Beach County Agricultural Reserve Reservoir ASR (75 MGD) Site-1 ASR (150 MGD) Utility preferred redistribution of wellfields Utility ASR in Miami-Dade County (75 MGD)	
LEC-1 F	Revised
<ul> <li>Everglades Construction Project</li> <li>L-31 seepage management with seepage barrier</li> <li>WCA-3A and 3B seepage management</li> <li>Phase I and II WCA-3A Decompartmentalization - S-356 structure redirected into Everglades National Park buffer area</li> <li>North of Lake Okeechobee Reservoir (201,250 ac-ft)</li> <li>EAA Reservoir (180,000 ac-ft)</li> <li>EAA North Surge Tank (120,000 ac-ft)</li> <li>EAA South Surge Tank (60,000 ac-ft)</li> <li>C-43 Reservoir (160,000 ac-ft)</li> <li>C-44 Reservoir (30,000 ac-ft)</li> <li>Southern L-8 Reservoir (50,000 ac-ft)</li> <li>Palm Beach Agricultural Reserve Reservoir (19,920 ac-ft)</li> <li>Site-1 Reservoir (14,760 ac-ft)</li> <li>C-9 Impoundment (10,000 ac-ft)</li> <li>C-11 Impoundment (6,400 ac-ft)</li> <li>C-11 Impoundment (6,400 ac-ft)</li> <li>Taylor Creek Nubbin Slough Reservoir (50,000 ac-ft)</li> <li>Bird Drive Reservoir (11,500 ac-ft)</li> <li>C-43 ASR (220 MGD)</li> <li>Lake Okeechobee ASR (1000 MGD)</li> <li>C-51 Regional ASR (170 MGD)</li> <li>West Palm Beach Catchment Area ASR (50 MGD)</li> <li>Palm Beach County Agricultural Reserve Reservoir ASR (75 MGD)</li> <li>Site-1 ASR (150 MGD)</li> <li>Miami-Dade County reuse facilities (131 MGD south facility; 50 MGD west facility)</li> <li>Utility preferred wellfield distribution</li> <li>Utility ASR in Miami-Dade County (75 MGD)</li> <li>North Lake Belt Storage Area (43,500 ac-ft)</li> <li>Central Lake Belt Storage Area (92,160 ac-ft)</li> </ul>	WSE Schedule modified to send water to EAA reservoirs and Lake Okeechobee ASR Regulation schedule in WCA-1 Rain-driven operations in WCA-2A, 2B, 3A, and 3B Overland flow from WCA3A and 3B to Everglades National Park as all structures are removed

**Table I-2.** Average Annual Lake Okeechobee Water Budgets (all estimates are in units of 1,000 ac-ft).

	1995 Revised				LEC-1					
	Base Case	2005	2010	2015	Revised					
Inflows										
Rainfall	1,684	1,684	1,684	1,684	1,684					
Fixed inflows (Modified Delta Storage [MDS])	942	942	942	942	942					
Kissimmee Inflows	980	980	932	932	932					
Taylor Creek Inflows	126	126	32	17	18					
Taylor Creek Reservoir Inflows	0	0	72	104	103					
ASR to Lake Okeechobee	0	0	0	57	115					
St. Lucie River Back Flows	80	80	79	87	86					
Caloosahatchee River Back Flows	7	13	12	7	5					
EAA Backpumping	53	51	4	3	3					
C43 Reservoir Backpumping	0	0	0	0	0					
C44 Reservoir Back Flow	0	0	7	9	10					
North of Lake Okeechobee Storage Reservoir	0	0	0	51	49					
L8 Back Flows	55	6	8	6	5					
S309 Back Flows	0	53	55	57	60					
Other Inflows	67	43	44	42	43					
Total	3,994	3,978	3,871	3,998	4,055					
	Outflow	/s	•	•						
Evapotranspiration (ET)	2,377	2,368	2,360	2,368	2,380					
Fixed Outflows (MDS)	283	283	283	283	283					
St. Lucie Regulatory	143	111	47	21	12					
St. Lucie Agricultural Demands	25	24	22	24	25					
St. Lucie Estuary Minimum Flows	0	0	9	11	14					
Caloosahatchee Regulatory	367	275	108	46	28					
Caloosahatchee Agricultural Demands	90	114	79	28	29					
Caloosahatchee Estuary Minimum Flows	0	0	15	16	16					
Regulatory to EAA Storage	0	0	204	252	220					
Regulatory to WCAs	58	181	144	111	96					
Water St. to Lucie Reservoir	0	0	0	0	0					
Water to Caloosahatchee Reservoir	0	0	44	15	13					
Water Supply to EAA	372	352	107	90	85					
Water Supply to the LEC Service Areas	77	73	95	85	90					
Water Supply to Glades	0	3	125	208	193					
Water Supply to the Stormwater Treatment Areas (STAs)	0	5	3	3	3					
North Storage	0	0	0	96	98					
Lake Okeechobee to ASR	0	0	0	113	233					
Other Outflows	163	154	189	193	198					
Total	3,955	3,943	3,834	3,963	4,016					

**Table I-3.** Lake Okeechobee Water Budgets for Drought Years<sup>a</sup> (all estimates are in units of 1,000 ac-ft).

	1995 Revised Base Case	2005	2010	2015	LEC-1 Revised					
Inflows										
Rainfall	1,383	1,383	1,383	1,383	1,383					
Fixed inflows (MDS)	657	657	657	657	657					
Kissimmee Inflows	386	386	434	434	434					
Taylor Creek Inflows	76	76	0	0	0					
Taylor Creek Reservoir Inflows	0	0	97	91	91					
ASR to Lake Okeechobee	0	0	0	133	256					
St. Lucie River Back Flows	106	106	98	98	98					
Caloosahatchee River Back Flows	17	31	32	19	18					
EAA Backpumping	43	49	4	2	2					
C43 Reservoir Backpumping	0	0	0	0	0					
C44 Reservoir Back Flow	0	0	7	8	8					
North Storage	0	0	0	36	40					
L8 Back Flows	71	11	19	16	9					
S309 Back Flows	0	25	19	22	31					
Other Inflows	57	35	34	33	33					
Total	2,796	2,759	2,784	2,932	3,060					
	Outfl	ows								
Evapotranspiration (ET)	2,350	2,328	2,308	2,327	2,354					
Fixed Outflows (MDS)	322	322	322	322	322					
St. Lucie Regulatory	0	0	0	0	0					
St. Lucie Agricultural Demands	50	46	47	48	48					
St. Lucie Estuary Minimum Flows	0	0	1	1	1					
Caloosahatchee Regulatory	0	0	0	0	0					
Caloosahatchee Agricultural Demands	135	166	158	59	57					
Caloosahatchee Estuary Minimum Flows	0	0	23	31	31					
Regulatory to EAA Storage	0	0	0	0	0					
Regulatory to WCAs	0	2	0	0	0					
Water to St. Lucie Reservoir	0	0	0	0	0					
Water to Caloosahatchee Reservoir	0	0	0	0	0					
Water Supply to EAA	457	424	258	226	205					
Water Supply to the LEC Service Areas	198	264	306	271	251					
Water Supply to Glades	0	13	113	242	222					
Water Supply to the Stormwater Treatment Areas (STAs)	0	9	6	5	5					
North Storage	0	0	0	0	0					
Lake Okeechobee to ASR	0	0	0	0	0					
Other Outflows	166	156	187	192	196					
Total	3,678	3,730	3,729	3,724	3,692					

a. The drought years were 1971, 1975, 1981, 1985, and 1989.

**Table I-4.** Average Annual Amounts of Water Delivered by the LEC Components (all estimates are in units of 1,000 ac-ft).

Component	Beneficiary	1995 Revised Base Case	2005	2010	2015	LEC-1 Revised
Caloosahatchee Reservoir	Basin water supply	N/A	N/A	56		·
	Caloosahatchee Estuary	N/A	N/A	83	the Calor	dressed by osahatchee
Caloosahatchee ASR	Basin water supply	N/A	N/A	N/A	Water Management Plan (CWMP) (SFWMD, 2000)	
	Caloosahatchee Estuary	N/A	N/A	N/A		
St. Lucie Reservoir	Basin water supply	N/A	N/A	1	1	1
	St. Lucie Estuary	N/A	N/A	9	9	8
	To Lake Okeechobee	N/A	N/A	7	9	10
North of Lake Okeechobee Storage (recovery)	Entire system (via Lake Okeechobee)	N/A	N/A	N/A	51	49
Lake Okeechobee ASR (recovery)	Entire system (via Lake Okeechobee)	N/A	N/A	N/A	57	115
EAA Reservoir Compartment 1	EAA Water Supply	N/A	N/A	219	199	204
	To EAA Reservoir Compartment 2A	N/A	N/A	12	16	20
EAA Reservoir Compartment 2A	EAA Water Supply	N/A	N/A	7	5	6
	Glades	N/A	N/A	210	135	122
EAA Reservoir Compartment 2B	Glades	N/A	N/A	N/A	126	110
LEC Service Area (LECSA) 1 and North Palm Beach Service Area (NPBSA) Reservoirs	LECSA 1 and NPBSA users	N/A	N/A	7	17	10
LECSA 1 and NPBSA ASR	LECSA 1 and NPBSA users	N/A	N/A	N/A	49	51
	EAA	N/A	N/A	N/A	34	37
LECSA 1 ASR	LECSA 2 water supply	N/A	N/A	N/A	25	32
C-9 Impoundment	LECSA 3 water supply	N/A	N/A	1	1	0
North Lake Belt Reservoir	LECSA 3 water supply	N/A	N/A	N/A	N/A	25
	Biscayne Bay	N/A	N/A	N/A	N/A	109
Central Lake Belt Reservoir	Glades	N/A	N/A	N/A	N/A	59
	Biscayne Bay	N/A	N/A	N/A	N/A	27
Bird Drive Recharge Area	LECSA 3 water supply	N/A	N/A	N/A	2	15
Southern Reuse Facility	Biscayne Bay	N/A	N/A	N/A	N/A	147
Western Reuse Facility	To Bird Drive Recharge Area	N/A	N/A	N/A	N/A	56
S-336B and S-338 Structures	To Biscayne Bay	118	64	110	125	8

**Table I-5.** Average Annual Amounts of Water Delivered by the LEC Components during Drought Years<sup>a</sup> (all estimates are in units of 1,000 ac-ft).

Component	Beneficiary	1995 Revised Base Case	2005	2010	2015	LEC-1 Revised
Caloosahatchee Reservoir	Basin water supply	N/A	N/A	38		
	Caloosahatchee Estuary	N/A	N/A	60	Being add	dressed by
Caloosahatchee ASR	Basin water supply	N/A	N/A	N/A	the CWMP	
	Caloosahatchee Estuary	N/A	N/A	N/A		
St. Lucie Reservoir	Basin water supply	N/A	N/A	1	1	1
	St. Lucie Estuary	N/A	N/A	0	0	0
	To Lake Okeechobee	N/A	N/A	8	8	8
North of Lake Okeechobee Storage (recovery)	Entire system (via Lake Okeechobee)	N/A	N/A	N/A	36	40
Lake Okeechobee ASR (recovery)	Entire system (via Lake Okeechobee)	N/A	N/A	N/A	133	256
EAA Reservoir Compartment 1	EAA Agricultural Water Supply	N/A	N/A	150	155	168
	To EAA Reservoir Compartment 2A	N/A	N/A	19	21	26
EAA Reservoir Compartment 2A	EAA Agricultural Water Supply	N/A	N/A	0	0	2
	Glades	N/A	N/A	26	34	42
EAA Reservoir Compartment 2B	Glades	N/A	N/A	N/A	9	8
LEC Service Area (LECSA) 1 and North Palm Beach Service Area (NPBSA) Reservoirs	LECSA 1 and NPBSA users	N/A	N/A	11	22	13
LECSA 1 and NPBSA ASR	LECSA 1 and NPBSA users	N/A	N/A	N/A	69	76
	EAA	N/A	N/A	N/A	24	30
LECSA 1 ASR	LECSA 2 users	N/A	N/A	N/A	57	42
C-9 Impoundment	LECSA 3 water supply	N/A	N/A	2	2	0
North Lake Belt Reservoir	LECSA 3 water supply	N/A	N/A	N/A	N/A	27
	Biscayne Bay	N/A	N/A	N/A	N/A	70
Central Lake Belt Reservoir	Glades	N/A	N/A	N/A	N/A	75
	Biscayne Bay	N/A	N/A	N/A	N/A	8
Bird Drive Recharge Area	LECSA 3 water supply	N/A	N/A	N/A	1	19
Southern Reuse Facility	Biscayne Bay	N/A	N/A	N/A	N/A	147
Western Reuse Facility	To Bird Drive Recharge Area	N/A	N/A	N/A	N/A	56
S-336B and S-338 Structures	To Biscayne Bay	118	64	58	68	6

a. The drought years were 1971, 1975, 1981, 1985, and 1989.

**Table I-6.** Average Annual Basin Demands and How They Are Met (all estimates are in 1,000 ac-ft).

Demand Basin/ Water Body	Total Demand/ Sources of Supply/ Demands Not Met	1995 Revised Base Case	2005	2010	2015	LEC-1 Revised
	Total Demand <sup>a</sup>	112	144	160	176	192
	Lake Okeechobee	90	114	79	28	29
Caloosahatchee Basin (surface water	Local Reservoir	N/A	N/A	56		
demand)	Caloosahatchee Basin ASR	N/A	N/A	N/A	Being a	ddressed by
	Local Sources and Rainfall	12	12	12	the	CWMP
	Demand Not Met	10	18	13		
	Total Demand	28	28	28	28	28
St. Lucie Basin	Lake Okeechobee	25	24	22	24	25
(surface water demand)	St. Lucie Reservoir	N/A	N/A	1	1	1
	Demand Not Met	3	4	4	3	1
	Total Demand	1,542	1,430	1,281	1,244	1,244
	Lake Okeechobee	372	352	107	90	85
EAA	EAA Reservoirs	N/A	N/A	226	205	209
EAA	LECSA 1 Regional ASR	N/A	N/A	N/A	34	37
	Local Sources and Rainfall	1,126	1,021	924	900	905
	Demand Not Met	44	57	24	15	8
	Lake Okeechobee	40	16	14	8	3
LECSA 1 (to maintain coastal	WCAs	35	94	85	43	32
canals)	LECSA 1 Reservoirs	N/A	N/A	7	17	10
	LECSA 1 Regional ASR	N/A	N/A	N/A	49	51
	Lake Okeechobee	4	7	12	3	9
LECSA 2 (to maintain canals)	WCAs	7	5	12	1	8
,	LECSA 1 Regional ASR	N/A	N/A	N/A	25	32
	Lake Okeechobee	30	40	68	74	77
LECSA 3 (to maintain canals)	WCAs	87	65	18	22	24
	LECSA 3 Reservoirs	N/A	N/A	1	3	40
	Caloosahatchee Basin Reservoir	N/A	N/A	83	Being a	ddressed by
Caloosahatchee	Local Basin Runoff	N/A	N/A	341	the CWMP	
Estuary	Lake Okeechobee (Environmental)	N/A	N/A	15	16	16
	Lake Okeechobee (Regulatory)	367	275	108	46	28

**Table I-6.** Average Annual Basin Demands and How They Are Met (Continued) (all estimates are in 1,000 ac-ft).

Demand Basin/ Water Body	Total Demand/ Sources of Supply/ Demands Not Met	1995 Revised Base Case	2005	2010	2015	LEC-1 Revised
	St. Lucie Basin Reservoir	N/A	N/A	9	9	8
St. Lucie Estuary	Local Basin Runoff <sup>b</sup>	N/A	N/A	587	587	587
St. Lucie Estuary	Lake Okeechobee (Environmental)	N/A	N/A	9	11	14
	Lake Okeechobee (Regulatory)	143	111	47	21	12
Glades	Lake Okeechobee <sup>c</sup>	N/A	3	125	208	193
(WCAs and Everglades National Park Rain-Driven Demands)	EAA Reservoirs	N/A	N/A	210	261	232
	EAA Drainage South <sup>d</sup>	1,070	970	663	664	662
	Regulatory from Lake Okeechobee	58	181	144	111	96
	Northwest Shark River Slough	461	568	397	434	451
Everglades National Park	Northeast Shark River Slough	88	402	524	596	685
	Total	549	970	921	1,030	1,136
	Snake Creek (S29)	172	155	190	185	114
	North Bay (G58, S28, and S27)	140	145	157	155	145
Biscayne Bay	Miami River (S26, 325B, and S25)	208	109	102	96	60
	Central Bay (G97, S22, and S123)	222	154	239	225	203
	South Bay (S21, S21A, S20F, S20G, and S197)	234	203	219	217	268

a. As estimated by the AFSIRS model developed by the University of Florida

b. Includes all contributing basins to the St. Lucie Estuary (C-23, C-24, North Fork, South Fork, and C-44)

c. Environmental releases from Lake Okeechobee to meet rain-driven demands

d. Includes flows from the Holey Land and Rotenberger wildlife management areas

**Table I-7.** Average Annual Basin Demands for Drought Years<sup>a</sup> and How They Are Met (all estimates are in 1,000 ac-ft).

Caloosahatchee Basin (surface water demand)         Local Reservoir         N/A         N/A         N/A         Being address the CWM.           Caloosahatchee Basin (surface water demand)         Local Sources and Rainfall         13         12         11         Being address the CWM.           St. Lucie Basin (surface water demand)         Lake Okeechobee         50         46         47         48         4           St. Lucie Reservoir         N/A         N/A         N/A         1         1           Demand Not Met         4         8         6         5         5           Total Demand         1,584         1,468         1,316         1,277         1,2           Lake Okeechobee         457         424         258         226         2           EAA Reservoirs         N/A         N/A         N/A         N/A         N/A         3	EC-1 vised
Caloosahatchee Basin (surface water demand)         Local Reservoir         N/A         N/A         N/A         A         Being address the CWM           Caloosahatchee Basin ASR         N/A         N/A         N/A         N/A         N/A         Being address the CWM           Local Sources and Rainfall         13         12         11         11         11         11         11         12         11         11         12         11         11         12         11         12         11         12         11         12         11         12         11         12         11         12         11         12         11         12         11         12	274
(surface water demand)         Caloosahatchee Basin ASR         N/A         N/A         N/A         Being address the CWM           Local Sources and Rainfall         13         12         11         11         11         11         11         12         11         11         11         12         11         11         12         11         11         12         11         11         12         11         11         12         11         12         11         12         11         11         12         11         12         11         12         11         12         11         12         11         12         11         12         11         12	57
Caloosahatchee Basin ASR	
Demand Not Met   17   31   24	
St. Lucie Basin (surface water demand)  Eake Okeechobee  St. Lucie Reservoir  St. Lucie Reservoir  N/A  N/A  N/A  N/A  St. Lucie Reservoir  N/A  N/A  N/A  N/A  N/A  N/A  EAA  EAA	1P
St. Lucie Basin (surface water demand)         Lake Okeechobee         50         46         47         48         4           St. Lucie Reservoir         N/A         N/A         1         1         1           Demand Not Met         4         8         6         5         5           Total Demand         1,584         1,468         1,316         1,277         1,2           Lake Okeechobee         457         424         258         226         20           EAA Reservoirs         N/A         N/A         N/A         N/A         N/A         24         3           LECSA 1 Regional ASR         N/A         N/A         N/A         N/A         N/A         3	
(surface water demand)       St. Lucie Reservoir       N/A       N/A       1       1         Demand Not Met       4       8       6       5       5         Total Demand       1,584       1,468       1,316       1,277       1,2         Lake Okeechobee       457       424       258       226       20         EAA Reservoirs       N/A       N/A       N/A       N/A       N/A       N/A       N/A       24       3	54
St. Lucie Reservoir   N/A   N/A   1   1     Demand Not Met   4   8   6   5     Total Demand   1,584   1,468   1,316   1,277   1,2   Lake Okeechobee   457   424   258   226   200   EAA Reservoirs   N/A   N/A   N/A   150   155   110   LECSA 1 Regional ASR   N/A   N/A   N/A   24   3	48
EAA Reservoirs N/A N/A N/A N/A 24 3	1
EAA Reservoirs N/A N/A 150 155 17  LECSA 1 Regional ASR N/A N/A N/A 24 3	5
EAA Reservoirs N/A N/A 150 155 11  LECSA 1 Regional ASR N/A N/A N/A 24 3	,277
LECSA 1 Regional ASR N/A N/A N/A 24 3	205
LECSA 1 Regional ASR N/A N/A N/A 24 3	170
Local Sources and Rainfall 1,043 942 853 830 83	30
	332
Demand Not Met 84 102 55 42 4	40
Lake Okeechobee 62 59 59 32 1	11
LECSA 1 WCAs 75 117 123 88 7 (to maintain coastal	75
'	13
LECSA 1 Regional ASR N/A N/A N/A 69 7	76
Lake Okeechobee 19 19 36 5 2	27
LECSA 2 (to maintain canals) WCAs 13 8 19 2 1	15
LECSA 1 Regional ASR N/A N/A N/A 57 4	42
	212
LECSA 3 (to maintain canals) WCAs 133 98 23 30 2	29
	46
Caloosahatchee Basin Reservoir N/A N/A 60 Being address	sed by
Caloosahatchee Local Basin Runoff N/A N/A 219 the CWM.	1P
Estuary Lake Okeechobee (Environmental) N/A N/A 23 31 3	31
Lake Okeechobee (Regulatory) 0 0 0 0	0

**Table I-7.** Average Annual Basin Demands for Drought Years<sup>a</sup> and How They Are Met (Continued) (all estimates are in 1,000 ac-ft).

Demand Basin/ Water Body	Total Demand/ Sources of Supply/ Demands Not Met	1995 Revised Base Case	2005	2010	2015	LEC-1 Revised
	St. Lucie Basin Reservoir	N/A	N/A	0	0	0
St. Lucio Estuany	Local Basin Runoff <sup>c</sup>	N/A	N/A	313	313	313
St. Lucie Estuary	Lake Okeechobee (Environmental)	N/A	N/A	1	1	1
	Lake Okeechobee (Regulatory)	0	0	0	0	0
Glades	Lake Okeechobee <sup>d</sup>	N/A	13	113	242	222
(WCAs and Everglades National Park Rain-Driven Demands)	EAA Reservoirs	N/A	N/A	26	43	50
	EAA Drainage South <sup>e</sup>	916	817	550	548	536
	Regulatory from Lake Okeechobee	0	2	0	0	0
Everglades National	Northwest Shark River Slough	143	247	142	171	183
	Northeast Shark River Slough	49	193	219	274	306
	Total	192	440	361	445	489
	Snake Creek (S29)	133	120	140	136	81
	North Bay (G58, S28, and S27)	106	109	119	118	111
Biscayne Bay	Miami River (S26, 325B, and S25)	121	74	64	59	33
	Central Bay (G97, S22, and S123)	128	100	132	124	135
	South Bay (S21, S21A, S20F, S20G, and S197)	151	136	150	149	210

a. The drought years were 1971, 1975, 1981, 1985, and 1989

b. As estimated by the AFSIRS model developed by the University of Florida

c. Includes all contributing basins to the St. Lucie Estuary (C-23, C-24, North Fork, South Fork, and C-44)

d. Environmental releases from Lake Okeechobee to meet rain-driven demands

e. Includes flows from the Holey Land and Rotenberger wildlife management areas